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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,991	02/16/2001	Sydney Edward Fisher	60,130-1003	3791

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CARLSON, GASKEY & OLDS, P.C.  
400 WEST MAPLE ROAD  
SUITE 350  
BIRMINGHAM, MI 48009

EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/784,991

Applicant(s)

FISHER ET AL.

Examiner

Christopher Boswell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-7, 11-13 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-7, 11-13 and 15-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 17.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter to which the examiner is referring is that of the "said profile of one of said plurality of laminations includes a tab having a tab profile and said profile of the other of said plurality of laminations has a local profile proximate to said tab profile, and said tab profile is different from said local profile", nowhere in the disclosure is there recitation of this subject matter. The examiner notes that the applicant discloses the plurality of laminations having different profiles within the retention plate, found on page 4 lines 3-5, yet it is not found within the specification as to where the original disclosure of the aforementioned subject matter is mentioned.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-13, 15-22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,906,123 to Spurr in view of U.S. Patent Number 4,534,191 to Rogers et al, and in further view of U.S. Patent Number 6,025,048 to Cutler et al.

Spurr disclose a vehicle door latch mechanism for releasably retaining a door comprising a latch bolt (12) having a closed condition capable of retaining a striker and an open condition capable of releasing the striker and a pawl (16) releasably securing the latch bolt in the closed condition. Spurr fails to disclose the latch and pawl being made from a plurality of structural laminations. Rogers teaches the use of laminates to provide favorable strength properties (column 1, lines 17-22). Spurr and Rogers fail to disclose the profile of one of the plurality of laminations is different from a profile of the other of the plurality of laminations. Cutler discloses a laminate in which the fibers of the laminate are aligned either unidirectionally or multidirectionally within the laminate layers (column 2, lines 21-24). ). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to further modify the teachings of Spurr to further enhance the strength of the latch mechanism without adding more weight into the design by the use of laminations to include fiber structure in the laminates to establish different profiles in the laminates.

Spurr also discloses tabs located on the latch bolt (figures 2 and 3) and on the pawl (figures 2 and 3), as in claims 24 and 25.

Further modifications to Spurr's latch bolt, pawl, and retention plate (Figure 2) according to the teachings of Rogers would make it possible to manufacture the parts using a plurality of laminations. Therefore, it would have been obvious to one with ordinary skill in the art at the

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time the invention was made to construct the latch bolt, pawl and retention plate using laminations, as in claims 4, and 6 to increase the strength and have the weight remain the same.

Spurr discloses the invention substantially as disclosed in claim 5. Included in this shape are a closed abutment surface, a first safety abutment surface for contact with the pawl of the latch mechanism, a retention surface for engagement with the striker associated with the latch mechanism and a latch pivot pin surface (Figure 3). However, Spurr does not disclose the use of a plurality of structural laminations for the latch bolt, the pawl, and the retention plate. Rogers teaches the use of a plurality of laminations (bolts 6) in a latching mechanism for a door in the analogous art of door latches for the purpose of strengthening the bolts of the latch. It would have been obvious to one with ordinary skill in the art at the time the invention was made to replace the existing latch, pawl, and retention plate, made from machined or stamped metal, with identical shaped parts made from the lamination process (columns 4-5, lines 67-3) taught by Rogers in order to strengthen the existing latch assembly without accumulating additional weight into the design.

Spurr also discloses a pawl (Figure 3) substantially similar in shape to that disclosed in claim 7. The pawl has an abutment surface for engagement with a closed abutment surface and first safety abutment surface of said latch bolt and a pawl pivot pin surface. Rogers teaches the use of laminations for added strength. Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the use of laminations into the construction of the latch bolt for the strength and weight benefits.

Spurr shows tabs (Figures 2 and 3) in the latch assembly, as in claims 11-13, for the latch bolt and the pawl. Rogers teaches the use of laminations to add strength without increasing

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weight. It would have been obvious for one with ordinary skill in the art at the time the invention was made to use the teachings of Rogers to modify the latch assembly of Spurr to include the tabs into the assembly of the latch bolt, pawl, and the retention plate. The location of the tabs could vary from piece to piece. With the parts being made of the laminations it would be possible to vary the width of the tab to differ it from the original piece, latch bolt, pawl, or retention plate.

Spurr discloses a latch assembly substantially similar to that of the claimed latch mechanism with the exception of the laminations used in the product. Rogers discloses the use of laminations to achieve a greater strength without obtaining a greater weight but fails to disclose if the laminations are non-homogeneous in that a strength of the lamination are measured in a first direction are different from a strength of the lamination as measured in a second direction. Rogers does not disclose the direction the laminates are assembled according to the strengths of the first and second laminations. Cutler discloses a laminate in which the fibers of the laminate are aligned either unidirectionally or multidirectionally within the laminate layers (column 2, lines 21-24). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to further modify the teachings of Spurr and Rogers to disclose fiber structure in the laminates. It is inherent that a fiber would be stronger in the transversal direction than in the lateral direction. Thus making the fiber laminate non-homogeneous in the direction the strength would be measured. Further more if the fibers in the laminations were aligned unidirectionally it would be inherent that the laminations could then be aligned in the direction of the respective strength directions. It would also then be possible to miss-align the laminates according to the desired results.

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Spurr discloses a latch assembly for vehicular use, but does not disclose the material of which the latch assembly would be manufactured. Rogers discloses the use of hardened steel for use as the material for the laminates (column 5, lines 2-3). Grain structure is considered an inherent property of steel. Therefore it would have been obvious to one with ordinary skill at the time the invention was made to further modify the latch assembly of Spurr to be manufactured out of a metal with a grain structure, such as steel, as in claim 18.

Spurr discloses the use of a molded plastic housing (column 2, line 14) in conjunction with the latch assembly, as in claims 19 and 20. Rogers discloses the use of laminations to improve the strength of an object without the accrual of weight. It would have been obvious to one with ordinary skill in the art at the time the invention was made to further modify the latch of Spurr to include a molded plastic housing over the plurality of laminations in the latch assembly. The plastic housing can be used to dampen noises associated with a latch in the opening and closing of the given door. The molded plastic can also be used to partially secure the latch mechanism.

Spurr discloses a latch mechanism as applied above, and Rogers teaches the use of a plurality of structural laminations. It would inherently obvious to one with ordinary skill in the art at the time the invention was made that a plurality of structural laminations are formed in one piece, as in claim 21.

### ***Response to Arguments***

Applicant's arguments filed July 24, 2003 have been fully considered but they are not persuasive. The examiner asserts that the teachings of Rogers' was taken as a teaching of how

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laminates are used within the analogous art of door latches, and the teachings of Cutler to teach that the fibers within a material, whether it be a ceramic or a metal, are capable of being aligned in different directions and thus causing different profiles within each laminate. The examiner would like to thank the applicant for agreeing with the examiner's statement of the layers of the laminate having different fiber directions, however, the examiner would like to point out that each layer of the lamination having a different fiber direction has a different profile, and thus each lamina has a different profile. Employing the previously discussed profiles of a laminate, as taught by Cutler, with the teaching of a laminated structure of a latch, as taught by Rogers, into the structure of the vehicular door latch of Spurr would thus read on the instant invention as claimed.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (703) 305-4067.

The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308-3179. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Anthony Knight  
Supervisory Patent Examiner  
Technology Center 3600

CJB